

Work Order ID 72563

Friday, July 29, 2011 11:51:18 AM



Page 1

Item ID: D2966-1-BENT

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Assembly 105

Start Date: 7/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 8/9/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan: 

Date: 11-07-29

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2966

Rev A

120

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend tube as per program BO105 on CNC Bender and Dwg D2966. Bend folio
#1 use bending aid DT9631

DD 11-9-13

150

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

1 8 8/11/09/20

300

0.00

Identify as per dwg & Stock Location
Packaging

46

Packaging

Memo

0.00

Packaging

DP 11-9-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 72563

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Page 2

Item ID: D2966-1-BENT

Accept



Setup Start



Revision ID:

Item Name: Skidtube Assembly 105

Stop



Start Date: 7/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 8/9/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

310

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/9/21 20

11-09-20
G

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Picklist Print

Friday, July 29, 2011 11:51:24 AM

Page 1

Work Order ID: 72563

Parent Item: D2966-1-BENT

Parent Item Name: Skidtube Assembly 105




Start Date: 7/29/2011

Required Date: 8/9/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev A 10.09.17 New issue EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2962-125  Outer Tube Extrusion		Manufactured	No				Each	25.0000		1			



Location

Loc Qty

Loc Code

HALL

25

17532

25

① DP 11-9-13

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries



DESIGN <i>RF</i>	DRAWN BY <i>RF</i>	DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2966	REV. A SHEET 1 OF 2
DATE 00.03.08		TITLE BO 105 SKIDTUBE ASSEMBLY	SCALE NTS
A	00.03.08	NEW ISSUE	

RELEASED
00.05.11 *#*

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 12543

4/11-07-29



Qty	Part Number	Description
X	D2966-041	SKIDTUBE ASSEMBLY
1	D2962-125	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2970-1	WEARPLATE
1	D2970-3	WEARPLATE
1	D2971	CROSS BOLT SPACER
7	D2973	CROSS BOLT SPACER
1	D2976	WEB
36	ALS7-1032-130 or ALS4-1032-130 or AKS7-1032-130 or AKS4-1032-130	INSERT
28	AN960JD10L	WASHER
26	MS27039-1-08	SCREW
2	MS27039-1-09	SCREW
1	D3176-1	BUSHING
1	D3176-3	NUT

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) WELDING TO BE DONE PER DART QSI 004.
- 3) INSERT D2976 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 4) USE DART DRILL TEMPLATE DT8451 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION B-B (34 PLACES) AFTER FINISH. SEAL WEARPLATE SCREWS WITH SIKAFLEX-241/-291.
- 5) DO NOT INSTALL MS27039-1-08 SCREWS AND AN960JD10L WASHERS IN THESE LOCATIONS.
- 6) INSTALL ALS7-1032-130 INSERT, MS27039-1-08 SCREW, AND AN960JD10L WASHER IN 2 PLACES THIS LOCATION BEFORE POWDER COATING.
- 7) FINISH:

ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2976 WEB
POWDER COAT ASSEMBLY ~~GLOSS WHITE (REF 4.3.5.4)~~ PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART
QSI 005 4.4 (OPTIONAL) *BLACK SANDTEX (REF 4.3.5.7)*



01.01.29
UP 01.01.30

A2	02.10.30	ADD D3176-1/-3
A1	01.01.29	CHANGE COLOR TO BLACK SANDTEX

UP
UP

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W/O:		WORK ORDER CHANGES					
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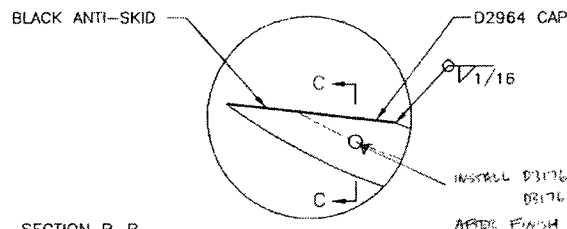
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DETAIL A
SCALE 1:3



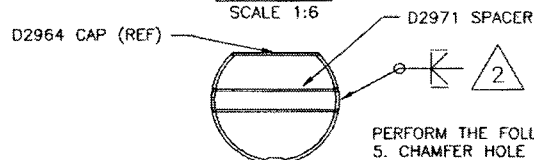
SECTION B-B
SCALE 1:6



- 4
ALS7-1032-130 INSERT (34 PLACES)
- 4
MS27039-1-08 SCREW (1)
AN960JD10L WASHER (1)
(26 PLACES)

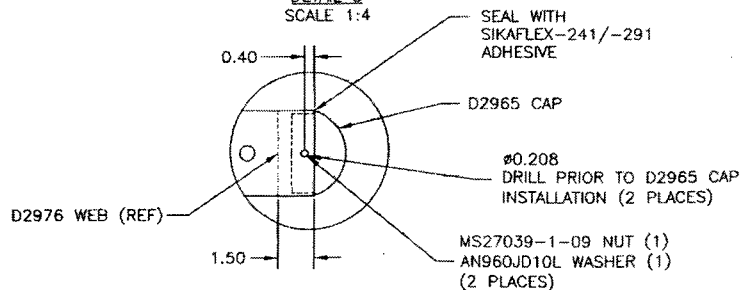
- AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.750 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D2973 SPACER (7 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.630 DRILL TO REMOVE SPILL OVER

SECTION C-C
SCALE 1:6

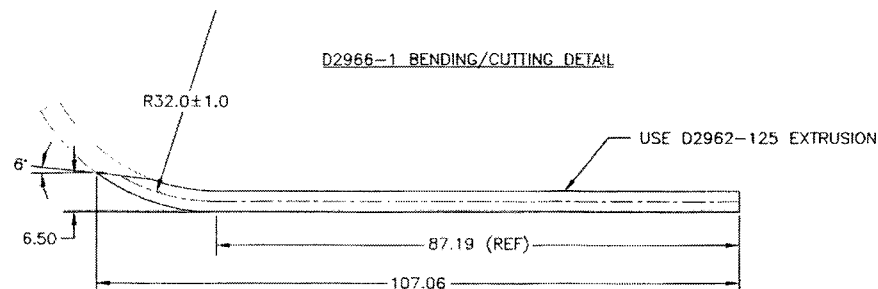


- PERFORM THE FOLLOWING FOR Ø0.625 HOLES ONLY:
5. CHAMFER HOLE 0.030 x 45°
 6. INSERT D2971 SPACER
 7. WELD INTO PLACE AND GRIND FLUSH
 8. PASS Ø0.484 DRILL TO REMOVE SPILL OVER

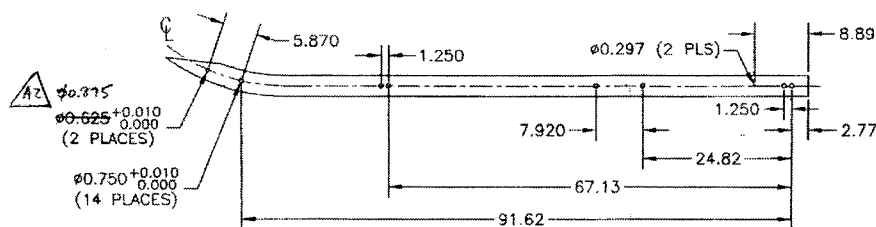
DETAIL D
SCALE 1:4



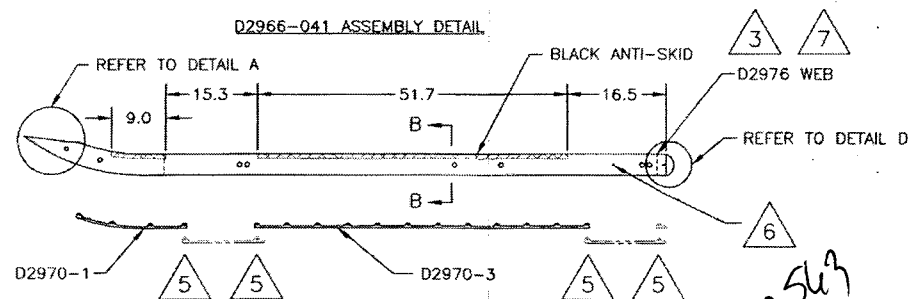
D2966-1 BENDING/CUTTING DETAIL



D2966-1 DRILLING DETAIL



D2966-041 ASSEMBLY DETAIL



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DESIGN RF	DRAWN BY RF
CHECKED A	APPROVED A
DATE 00.03.08	TITLE BO 105 SKIDTUBE ASSEMBLY

DART DART AEROSPACE USA, INC. BELLINGHAM, WA	REV. A SHEET 2 OF 2
DRAWING NO. D2966	SCALE 1:20

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